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NOTICE OF ALLOWANCE AND FEE(S) DUE

Rossi, Kimms & McDowell LLP 20609 Gordon Park Square Suite 150 Ashburn, VA 20147 EXAMINER
PAUL, DISLER

ART UNIT PAPER NUMBER
2614

DATE MAILED: 02/22/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/584,672	06/26/2006	Yusuke Konagai	YAMA-0130	5043	

TITLE OF INVENTION: AUDIO OUTPUT APPARATUS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/23/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED.</u> SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

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III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

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(571)-273-2885 or <u>Fax</u>

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				-					(Signature)
									(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CON	FIRMATION NO.
10/584,672 TITLE OF INVENTION	06/26/2006 N: AUDIO OUTPUT AP	PARATUS	Yusuke Konagai				YAMA-0130		5043
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nonprovisional	NO	\$1510	\$300		\$0		\$1810		05/23/2011
EXAM	MINER	ART UNIT	CLASS-SUBCLASS	3					
PAUL,	DISLER	2614	381-001000						
"Fee Address" inc PTO/SB/47; Rev 03- Number is required.	oondence address (or Cha B/122) attached. lication (or "Fee Address 02 or more recent) attach ND RESIDENCE DAT.	(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.							
PLEASE NOTE: Un recordation as set for (A) NAME OF ASSI	less an assignee is ident th in 37 CFR 3.11. Com GNEE	tified below, no assignee pletion of this form is NO	data will appear on the Tasubstitute for filing (B) RESIDENCE: (C)	he pa g an a	ntent. If an assigne assignment. and STATE OR C	OUNT			
4a. The following fee(s) Issue Fee Publication Fee (National Advance Order - +	4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) ☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).								
5. Change in Entity Sta	,	· · · · · · · · · · · · · · · · · · ·							
NOTE: The Issue Fee an	ns SMALL ENTITY state ad Publication Fee (if req records of the United Sta	us. See 37 CFR 1.27. uired) will not be accepte ates Patent and Trademark	Definition by the best of the best description of the						
Authorized Signature					Date				
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an application. Confident submitting the complete this form and/or suggest	ntiality is governed by 35 d application form to the ions for reducing this bu Virginia 22313-1450. DC	CFR 1.311. The information of U.S.C. 122 and 37 CFR to USPTO. Time will vary urden, should be sent to the DNOT SEND FEES OR	1.14. This collection i depending upon the incention Chief Information C	is esti indiv: Office	imated to take 12 n idual case. Any co r, U.S. Patent and	ninutes mments Tradem	to complete, including on the amount of titark Office, U.S. Dep	ng gathe me you artment	ering, preparing, and require to complete of Commerce, P.O.

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10/584,672	06/26/2006	Yusuke Konagai	YAMA-0130	5043		
37013 75	90 02/22/2011		EXAMINER			
Rossi, Kimms &		PAUL, DISLER				
20609 Gordon Parl Suite 150	0609 Gordon Park Square			PAPER NUMBER		
Ashburn, VA 2014	7		2614			
		DATE MAILED: 02/22/2011				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No.	Applicant(s)						
	10/584,672	KONAGAI ET AL.						
Notice of Allowability	Examiner	Art Unit						
	DISLER PAUL	2614						
	DIOLETTI AOL	2014						
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED or other appropriate comr GHTS. This application is	in this application. If not included nunication will be mailed in due cour	se. THIS					
1. This communication is responsive to <u>12/8/10</u> .								
2. The allowed claim(s) is/are <u>1-13;15-20</u> .								
 3. ☐ Acknowledgment is made of a claim for foreign priority unallocation. a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have) or (f).						
2. ☐ Certified copies of the priority documents have		ion No						
3. ☐ Copies of the certified copies of the priority documents have	• •		from the					
International Bureau (PCT Rule 17.2(a)).	samonto navo boon receiv	od III tillo Hational Stage application						
* Certified copies not received:								
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.								
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			CE OF					
5. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.							
(a) including changes required by the Notice of Draftspers	on's Patent Drawing Revi	ew (PTO-948) attached						
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date								
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment	or in the Office action of						
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).								
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.								
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5 Notice of	Informal Patent Application						
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)		Summary (PTO-413),						
3. ☑ Information Disclosure Statements (PTO/SB/08),	Paper No	b./Mail Date s Amendment/Comment						
Paper No./Mail Date	_							
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. ⊠ Examiner 9. □ Other	's Statement of Reasons for Allowan	ce					
	9. ☐ Otilei	<u></u> ·						

DETAILED ACTION

Allowable Subject Matter

Claims 1-13; 15-20 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: in regard to independent claim1, while the prior art of records disclose of an audio output apparatus comprising: an array speaker unit having a plurality of speaker; a measuring unit that measures levels of a plurality of input sound signals including a first sound signal for a first sound beam to be produced by the plurality of speaker units and a second sound signal for a second sound beam to be produced by the plurality of speaker units; a sound level adjusting unit that adjusts gains based on the measured levels by the measuring unit so that the plurality of sound signals have equal magnitudes; a delay unit having a first delay circuit for each of the adjusted first sound signal and a second delay circuit for the second sound signal; a directivity control circuit that controls a delay setting for each of the first and second delay circuits based on a desired focal position of each of the first and second sound-wave beams to be directed to and a position of each of the plurality of speaker units, to emit the first sound beam from the plurality of speaker units in a first directivity and to emit the second sound beam from the plurality of speaker units in a second directivity different from the first directivity.

However, none of the prior art of records disclose of the specific wherein the directivity control circuit to emit the first sound beam from the plurality of speaker

units in a first directivity for one listener and to emit the second sound beam from the plurality of speaker units in a second directivity different from the first directivity for another listener, wherein the first sound signal is independent of the second sound signal so that the contents of the first sound signal for the first beam is different from contents of the second sound signal for the second beam.

Similarly, Claims 2-3; 15; 20 have been analyzed and allowed for their dependencies on the allowable claim 1.

The independent claims 4-7 have been analyzed and allowed for same reason as in claim 1.

Similarly, Claims 8-13; 16-19 have been analyzed and allowed for their dependencies on the allowable claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DISLER PAUL whose telephone number is (571)270-1187. The examiner can normally be reached on 10-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on (571) 272-78-48. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/584,672 Page 4

Art Unit: 2614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. P./ Examiner, Art Unit 2614

/Devona E. Faulk/ Primary Examiner, Art Unit 2614